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# FAMILY ECONOMICS REVIEW

Consumer and Food Economics Research Division, Agricultural Research Service, UNITED STATES DEPARTMENT OF AGRICULTURE

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FAMILY ECONOMICS REVIEW is a quarterly report on research of the Consumer and Food Economics Research Division and on information from other sources relating to economic aspects of family living. It is developed by Dr. Emma G. Holmes, research family economist, with the cooperation of other staff members of the Division. It is prepared primarily for home economics agents and home economics specialists of the Cooperative Extension Service.

Urban families spent an average of \$563 on clothing (including clothing services) in 1961, rural nonfarm families \$408, and farm families \$427. These expenditures represented 10.4, 9.5, and 11.9 percent of the total budget for family living of the respective groups. The average for all U.S. families was \$522, or 10.4 percent of the budget. These data are from the Survey of Consumer Expenditures conducted by the U.S. Department of Agriculture and the Bureau of Labor Statistics. Other variations in clothing expenditures related to place of residence as well as to family size and income will be discussed in this article. ("Family" here includes unrelated individuals or "single consumers" as well as families of two or more persons.)

### Family size

Large families spent less per person on clothing than small families at the same income level, although their total clothing expense was larger both in dollars and as a percentage of total consumption (tables 1 and 2). Thus, clothing expenditures did not increase in proportion to the increase in the number of persons to be clothed. For example, urban families with incomes of \$6,000 to \$7,500 spent only 26 percent more for clothing for 4 than for 2. This is partly because the larger families include more young children, and it costs less to clothe a child than an adult. However, it is also true that when a given amount must be stretched to provide for more people, each person must get less. Expenditures per person at this income level varied as follows:

Family size	Average clothing expenditure per person
1	\$450
2	280 221
¥	176
5	143

The much larger average expenditure per person of the 1-person than the 2-or-more person nonfarm families reflects in part the difference in the way of life of individuals living alone and those in family groups.

### Income

Families were generally willing to increase their spending for clothing when income was higher. Urban families of 2 persons, for example, spent an average of \$98 when income was \$1,000 to \$2,000; \$396 when it was \$5,000 to \$6,000; and \$880 when it was \$10,000 to \$15,000. Among these families the difference in spending for clothing was about proportionate to the difference in income. That is, when income in the 2-person urban families was 1 percent higher, clothing expenses were also about 1 percent higher (table 3). In 2-person farm families, however, a 1-percent increase in income was accompanied by only about one-third of 1-percent increase in clothing expenditure.

Table 1.--Family clothing expenditures by family size, urbanization, and income, 1961 (Average not shown for cells of less than 30 families)

Urbanization and			Number o	f person	s in the	family	
money income after taxes	All	1	2	3	4	5	6 or more
Urban, all Under \$1,000 \$1,000-\$1,999 \$2,000-\$2,999 \$3,000-\$3,999 \$4,000-\$4,999 \$5,000-\$5,999 \$6,000-\$7,499 \$7,500-\$9,999 \$10,000-\$14,999 \$15,000 and over -	\$563 60 104 222 330 419 502 654 845 1,167 1,876	\$223 44 90 227 293 388 406 450 	\$410  98 171 276 343 396 560 667 880 1,805	\$661  231 345 459 528 663 826 1,124	\$774   459 454 587 705 890 1,311	\$850   549 554 716 944 1,297	\$836   541 615 792 1,046 1,233
Rural nonfarm, all - Under \$1,000 \$1,000-\$1,999 \$2,000-\$2,999 \$3,000-\$3,999 \$4,000-\$4,999 \$5,000-\$5,999 \$6,000-\$7,499 \$7,500-\$9,999 \$10,000-\$14,999	408 51 113 209 279 366 474 632 795 1,078	101 47 76 156   	257 55 85 152 205 268 355 451 585	425  178 265 267 371 439 706 618	582   296 404 545 633 816 	617    414 494 702 953	620  304 463 512 594 727 960
Farm, all Under \$1,000 \$1,000-\$1,999 \$2,000-\$2,999 \$3,000-\$3,999 \$4,000-\$4,999 \$5,000-\$5,999 \$6,000-\$7,499 \$7,500-\$9,999 \$10,000-\$14,999 \$15,000 and over -	427 208 202 280 391 409 518 653 737 820 1,077	94 76 70     	228 145 157 183 237 246 307 432 	414  236 307 404 402 447 511 	537  310 339 440 459 540 705 756 	605    593 694 	676  354 429 568 534 729 821 917 

Source: 1960-61 Survey of Consumer Expenditures, U.S. Bureau of Labor Statistics Reports 237-38, Supplement 3 Part C and 237-88, Supplement 3; and U.S. Department of Agriculture Report CES 35.

Table 2.--Family clothing expenditures as a percentage of expenditures for current consumption, by family size, urbanization, and income, 1961

(Percentage not shown for cells of less than 30 families)

Urbanization and		1	Number o	f persons	s in the	family	
money income after taxes	All	1	2	3	4	5	6 or more
Urban, all  Under \$1,000  \$1,000-\$1,999  \$2,000-\$2,999  \$3,000-\$3,999  \$4,000-\$4,999  \$6,000-\$7,499  \$7,500-\$9,999  \$10,000-\$14,999  \$15,000 and over -	10.4 4.5 5.9 8.3 9.1 9.6 10.6 11.3 12.0 12.6	8.6 4.2 5.7 9.5 10.5 9.4 8.8	8.7  4.7 6.4 7.7 8.3 9.5 10.6	10.6  7.9 9.2 9.9 9.7 10.6 10.9 11.7	11.3  10.9 9.6 10.4 11.6 12.8	12.1   11.1 9.6 11.3 12.4 12.9	12.1   11.4 11.3 12.2 12.8 12.4
Rural nonfarm, all - Under \$1,000 \$1,000-\$1,999 \$2,000-\$2,999 \$3,000-\$3,999 \$4,000-\$4,999 \$5,000-\$5,999 \$6,000-\$7,499 \$7,500-\$9,999 \$10,000-\$14,999	9.5 5.3 6.5 7.8 8.4 9.2 10.7 11.8	5.8 5.0 5.0 6.7  	7.5.2 4.9 5.4 6.5 7.7 9.1	9.3  9.0 9.3 7.7 8.1 8.8 11.5 9.3	10.3  7.8 8.7 10.3 10.5 10.8	10.8   9.1 8.9 11.0 12.5	11.6  10.6 11.3 10.8 11.1 11.9 12.4
Farm, all	11.9 10.4 10.8 11.7 10.9 11.8 12.8 13.0 13.3	6.3 7.7 5.8     	8.4 8.1 8.3 7.9 8.6 8.0 8.1 9.2	11.4  10.6 11.3 11.7 10.1 10.3 11.5 	12.5  13.2 10.8 11.9 11.6 12.0 13.1 13.6	13.2    12.9 13.4 	14.9  16.9 16.1 15.3 12.4 15.4 14.8 14.1

Source: Same as for Table 1.

The reason for this farm-urban difference in rate of increase in clothing expenditures with rising income lies in the greater year-to-year fluctuation of farm as compared with urban incomes, and the way families adjust to these fluctuations. In practice, families spend more nearly in accordance with what they consider their normal income than with this year's income. When income is temporarily low they tend to maintain spending as usual by saving less or drawing on their assets. When income is temporarily high they save more or pay off debts rather than stepping up spending.

Table 3.--Increase in family clothing expenditures accompanying a 1-percent increase in 1961 income and proxy for normal income, by family size

	Increase in clothing expenditure with l-percent increase in					
Family size		l money ine			ky for nomincome 1/	nal
	Urban	Rural non- farm	Farm	Urban	Rural non- farm	Farm
	Percent	Percent	Percent	Percent	Percent	Percent
All	1.09	1.07	0.57	1.38	1.34	1.17
<pre>1 person 2 persons 3 persons 4 persons 5 persons 6 or more persons</pre>	1.12 •97 •97 .84 •78	.74 1.06 .82 .97 .92	.27 .32 .47 .36 .20	1.45 1.44 1.21 1.15 1.12	1.08 1.36 1.07 1.22 1.23	.60 .99 1.07 1.07 .91

<sup>1/</sup> Total expenditures for current consumption plus outlays for gifts and contributions.

Source: Computed from sources cited for table 1.

Since data on "normal" income are not available, we have classified the families by their total outlays for consumption in 1961 (current living plus gifts and contributions), which experience has shown is a good proxy for normal income. Table 3 shows percentages of increase in clothing expenditures accompanying 1-percent increases in normal (proxy) and in 1961 incomes. The normal (proxy) income classification brought the percentage increase in spending for clothing by farm families closer to that of urban families. For example, a 1-percent rise in normal (proxy) income of 2-person families was accompanied by an increase in spending for clothing of 1.4 percent for urban and 1.0 percent for farm families. This compares with the 1- and 0.3-percent increases noted in relation to a 1-percent rise in 1961 income.

In general, the percentage of the budget allocated to clothing by urban and rural nonfarm families of a given size increased as income rose.

### Urbanization

Clothing expenditures of farm and urban families do not show a simple pattern of similarity or difference related to place of residence. In general, when income was low in relation to family size the farm families spent about as much or more than urban families, on the average. When income per person was high, however, farm families generally spent less than urban families.

These differences in clothing expenditures of farm and urban families are related to the year-to-year variations in income, discussed above. In 1961, as in any other year, relatively more farm than urban families had incomes that were temporarily low but continued to spend about their usual amount for clothing. This is reflected in the tendency toward higher average clothing expenditure of farm than of urban families with low per person incomes. In 1961, also, relatively more farm than urban families had temporarily high income but continued to spend usual amounts for clothing. This reflects in the lower average clothing expenditures of farm than urban families with high per person incomes.

As noted at the beginning of this article, urban families spent most for clothing and rural nonfarm families least, with farm families between. Much of the difference can be accounted for by differences in average income and family size. Among families with incomes between \$3,000 and \$4,000 (the middle of the income range for farm families, where year-to-year variation can therefore be expected to be least) and comparable as to family size, differences were much smaller. For example, four-person families in cities spent \$459, compared to \$440 by farm families and \$296 by rural nonfarm families.

Clothing expenditures took a larger percentage of the budget of farm than urban families of the same size and income class. Because farm families have substantial amounts of home-produced food and therefore spend less for consumption, their clothing expense is a larger percentage of the total.

### Region

Families in the Northeast had the largest average expenditures for clothing, those in the South the smallest. Differences in spending between regions were in the same order as differences in income. Average expenditures and income for all families (urban, rural nonfarm, and farm) in each region were:

Region	Average expenditures for clothing	Average income after taxes
Northeast	\$619	\$6,435
North Central	502	5,535
South	441	4,600
West	552	6,218

Average family size was virtually the same in all regions (3.1 or 3.3 year-equivalent persons), so family size cannot be considered a factor in explaining the variation. The larger proportions of rural nonfarm families in the South and North Central--28 and 21 percent, respectively, as compared to 17 and 16 percent in the West and Northeast--explains some of the variation, since rural nonfarm families tend to be low spenders.

---Virginia Britton

### HOMEFREEZER MANAGEMENT SURVEY: The Families and Their Freezers

How do families that own freezers use them? The answer to this question has important implications for consumer education programs. Answers from almost 500 families in the Fort Wayne, Indiana, area have been obtained by the Consumer and Food Economics Research Division. This article gives information about the families included in the survey, the freezers they owned, and their reasons for acquiring freezers.

The survey, conducted in 1964-65, included 240 urban and 242 farm families that owned homefreezers. The families were selected as follows: Telephone numbers drawn systematically from the Fort Wayne area telephone directory were called, locating 60 urban and 60 farm freezer-owning households. Each of these served as a nucleus for locating 4 freezer-owning households in the area willing to participate in the study.

The urban and farm households were quite similar in distribution by size and each had a median of 4 members. 1/ The urban households tended to have higher incomes, about 60 percent—as compared with 40 percent of the farm households—reporting after—tax money income of \$6,000 or more a year. Income groupings were as follows:

Money income after tax:	Percent of Urban	families Farm
Under \$2,000	1	5
\$2,000 to \$3,999	7	12
\$4,000 to \$5,999	30	43
\$6,000 to \$7,999	47	29
\$8,000 and over	i6	11

About 24 percent of the urban and 16 percent of the farm homemakers were employed outside the home in full-time or part-time jobs.

i/ Household size refers to the number of persons who ate from the household food supply, whether family members or not.

### Why a homefreezer?

Many of the homemakers gave more than one reason for acquiring a home-freezer. About 40 percent of the reasons given by urban women and 52 percent of those given by farm women had to do with economy (table 1). (Sometimes the reasons the women gave specifically mentioned "saving" and sometimes the reasons seemed to imply that saving was what the person had in mind. Both types of reasons have been interpreted as economy and put under that heading.) The urban homemakers most frequently mentioned saving money on meat by buying a side or quarter and freezing it, and freezing local, homegrown, in-season fruits and vegetables. Most of the "economy" reasons given by the farm homemakers were of the "money savings implied" type. They most frequently mentioned freezing their own fruits, vegetables, and meats.

About 40 percent of the reasons given by the urban women for acquiring a freezer and 36 percent of those given by farm women related to convenience. The urban homemakers mentioned most often saving time in shopping, not shopping as often, and having food on hand. Farm homemakers mentioned most often having food on hand and that freezing is easier than canning.

The remaining 19 percent of the reasons given by urban and 13 percent by farm homemakers were a miscellany. Among these the most frequently mentioned single reason for urban families was that they needed more freezer space than their refrigerators provided. For farm families it was that they expected to have better quality, better tasting food with a homefreezer.

### What kind, size, and age of freezer?

About 53 percent of the freezers in the urban homes were the upright type, and about 73 percent of those in farm households were the chest type (table 2). Only one urban and one farm household had a walk-in unit.

The farm families tended to have larger freezers, with more special features, than the urban families. Median size of the farm freezers was 18 cubic feet, urban freezers 15 cubic feet. Apparently household size was not a very important factor in selecting the size of freezer, since the two seemed to have less relationship to each other than one might expect. Considerably more farm than urban families had a freezer with an alarm bell or light, a quick-freezing section, storage dividers or baskets, and a thermometer. Only 36 percent of the farm and 25 percent of the urban freezers had this last important feature—a thermometer.

More farm than urban households had acquired their freezers when new-87 and 77 percent, respectively. In general, the farm households had also used their freezers longer--a median of 8 years compared with 6 years for the urban households. About 10 percent of the farm and 5 percent of the urban freezer owners had used their freezers 15 or more years.

All but six urban and six farm families were sole owners of their freezers. Most of these were also sole users, only 10 percent of the urban and 5 percent of the farm families ever sharing the space with anyone else. A few families-

Table 1.--Reasons for acquiring a homefreezer, urban and farm households

Reasons	Urban 1/	Farm 1/
	Percent	Percent
All	100.0	100.0
Economy: All Money savings stated: 2/	41.2	51.5
Save money on meat; buy side, quarter Save money on meat; buy on sale, bargains Save money on food other than meat Cut expenses, save money	10.3 2.7 5.2 5.2	5.3 .5 3.3 3.3
Money savings implied: 3/ Freeze local, homegrown, in-season fruits and vegetables Freeze (butcher) own meat, poultry Buy food in quantity Freeze leftovers	10.9 2.4 3.9 .6	20.6 14.8 2.5 1.3
Convenience: All	39.4 10.9 7.9 11.8 2.4 3.9 2.4	35.9 7.5 2.0 10.1 1.3 10.6 4.5
Miscellaneous: All Needed more freezer space Started with food plan Got it as a gift; already in house; always	19.4 9.4 1.5	12.6 1.5 .5
had one	3.9 2.4 .3 1.8	3.3 7.0 .3 0
Number of reasons given 4/	330	398

Responses from 233 urban and 231 farm households.

Savings specifically mentioned by the homemaker. Homemaker's answer interpreted to indicate idea of saving. More than one reason given by some homemakers.

Table 2.--Characteristics and location of the homefreezers, urban and farm households

Characteristic	Urban	Farm
	Percent	Percent
All freezers	100.0	100.0
Type:     Chest     Upright     Walk-in	46.2 53.3 .4	72.7 26.9 .4
Size in cubic feet: 5 or less 5.1 through 10.0 10.1 through 15.0 15.1 through 20.0 20.1 through 25.0 25.1 or more	2.5 14.2 38.8 37.5 6.2	.4 4.5 25.6 49.6 18.6 1.3
Special features: Thermometer	25.0 40.4 40.0 3.2 8.3	36.4 48.8 65.7 36.0 22.3
Condition when acquired:  New Used	77.5 22.5	86.8 13.2
Age: (years used by present owner)  Less than 1 year  1 through 4 years  5 through 9 years  10 through 14 years  20 or more years  Not given	8.3 31.3 27.1 28.8 2.9 1.3	6.6 26.0 27.3 26.9 10.3 1.7
Cellar, basement Utility, laundry room Kitchen  Porch or breezeway Dining room Other room in house Shed, barn, milk house, etc	45.4 10.4 11.7 21.7 5.0 2.9 2.9	33.1 21.1 14.5 9.9 14.0 2.1 2.5 2.9

<sup>1/</sup> Includes shelves on doors, inside light, magnetic door, lock and key, etc.

6 percent of the farm and less than 1 percent of the urban--rented additional freezer space in a locker plant.

### Location of the homefreezer

The homefreezer was located in the cellar or basement of the home more frequently than any other place. About 45 percent of the urban and 33 percent of the farm families had the freezer there (table 2). The next most common spot in urban homes was the garage, and in farm homes the utility room. Third in order came the kitchen, the location of 12 percent of the freezers in the city and 15 percent of those on farms.

### Storage temperatures

The temperature of the frozen food storage area of the freezer was taken during the first interview and again at the end of the study, after storage records had been kept. About 70 percent of the freezers in farm and 60 percent in urban households registered the recommended storage temperature of 0°F. or below at each reading (table 3). The fact that so many--about 30 percent and 40 percent, respectively--registered temperatures higher than 0°F. points to the need to emphasize temperature control in consumer education programs.

Table 3.--Temperature of the frozen food storage area of homefreezers, urban and farm households

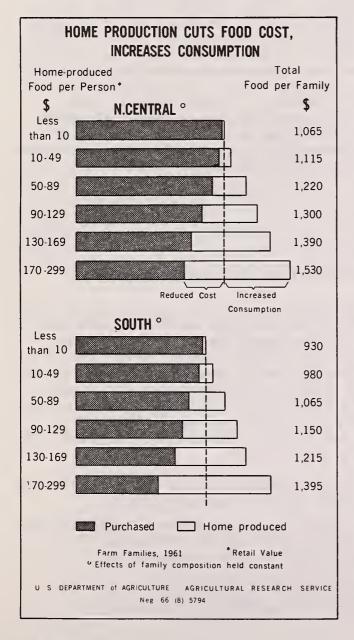
Temperature	Urban ho	useholds	Farm hou	seholds		
° F.	First Interview	Final Interview	First Interview	Final Interview		
	Percent	Percent	Percent	Percent		
All freezers 0 and below 1 through 5 6 through 10 - 11 through 15 - 16 through 20 21 through 25 26 through 30	100.0 60.3 19.7 14.2 2.9 2.5 0	100.0 62.5 17.6 14.8 2.3 2.3 0	100.0 68.6 19.2 8.8 2.9 .4	100.0 72.7 16.7 7.4 2.3 .5 .5		
Number of freezers	239	216	239	216		

### More to come

Additional information from this study will appear in forthcoming issues of Family Economics Review. Future articles will discuss such freezer management and use practices as package dating and record keeping; amount of freezer space used, and amount taken up by different kinds of foods; the use of foods from the freezer; the kinds, amounts, and sources of foods put into the freezer; and advantages and disadvantages of homefreezer ownership. A complete report of all findings will be published later.

-- Ruth Redstrom

Families that raise some of their own food are likely to spend less for food but have more--and possibly better--food than those that raise none. Every dollar's worth of food that farm families in the North Central and Southern regions produced at home in 1961 reduced their expenditures for food by about 40 cents. Thus, home production freed this amount to use for buying other goods and services for family living, to invest in the farm business, or to save for future use. The remaining 60 cents worth of home-produced food gave the family that much more to eat than others had. Since home-produced food is mainly meat, milk, eggs, vegetables, and fruit--foods that contain more nutrients per dollar of value than purchased foods, on the average--this means a better diet for the families that have it.



The chart shows how home-produced food consistently reduced food expense and added to the food supply of farm families in the two regions. The bars represent total value of food used in a year when different amounts were home produced. 1/ These amounts-measured in terms of dollar value-ranged from less than \$10 (including none at all) to between \$170 and \$299 worth per family member.

The top bar for each region represents the average value of food consumed in 1961 by farm families that raised little or none of their own. The dotted line from the end of this bar through those below helps you to compare total food consumed by families producing varying amounts with that consumed by the nonproducing families. It also shows how much of the value of home-produced food took the place of an expenditure for food, and how much added to total food consumed. (The unshaded portion to the left of the line represents reduction in expenditure, and that to the right represents gain in consumption.) The table on page 14 shows expenditures for purchased food and retail value of home-produced food.

l/ Within each region family size
and composition have been held constant so that the comparison is not
affected by these factors.

Value of food consumed per farm family, by value of home-produced food per person, North Central and Southern Regions, 1961

	Value of food consumed per family							
Value of home-produced	North	Central R	egion	Son	Southern Region			
food per person	Total	Purchased	Home- produced	Total	Purchased	Home- produced		
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars		
Less than \$10 \$10 - \$49 \$50 - \$89 \$90 - \$129 \$130 - \$169 \$170 - \$299	1,067 1,116 1,219 1,299 1,390 1,529	1,048 1,016 947 894 834 741	19 100 272 405 556 788	930 981 1,067 1,149 1,214 1,395	904 870 812 754 710 586	26 111 255 395 504 809		

These findings are from the 1960-61 Survey of Consumer Expenditures, a joint project of the U.S. Department of Agriculture and the Bureau of Labor Statistics. The article is based on unpublished data from the farm segment of the survey. Home food production as related to income, family size, and region was discussed in the October 1965 issue of FAMILY ECONOMICS REVIEW.

-- Jean L. Pennock

### RECENT PUBLICATIONS FROM THE CONSUMER EXPENDITURE SURVEY

Ten reports of the Survey of Consumer Expenditures in 1960-61 published in 1966 are listed below. The first five give expenditure and income data by cross-classifications of family characteristics -- for example, family size and income, age of head and income, and education and occupation of head. The last five give detailed data on farm family incomes and expenditures -- for example, expenditures for separate items of furniture and clothing. Single free copies are available from the Consumer and Food Economics Research Division, U.S. Department of Agriculture, Federal Center Building, Hyattsville, Maryland 20782. Please give your Zip Code when ordering publications.

CONSUMER EXPENDITURES AND INCOME: Cross-classification of Family Characteristics, Urban and Rural, 1960-61. (Five reports, as follows:)

Northeast Region - USDA, CES 26 (also released by Bureau of Labor Statistics as BLS 237-89, Supplement 2)

North Central Region - USDA, CES 27 (BLS 237-90, Supplement 2)

Southern Region - USDA, CES 28 (BLS 237-91, Supplement 2) Western Region - USDA, CES 29 (BLS 237-92, Supplement 2)

United States - USDA , CES 30 (BLS 237-93, Supplement 2)

CONSUMER EXPENDITURES AND INCOME: Detail of Expenditures and Income, Rural Farm Population, 1961. (Five reports, as follows:)

Northeast Region - USDA, CES 31 Western Region - USDA, CES 34 North Central Region - USDA, CES 32 United States - USDA, CES 35 Southern Region - USDA, CES 33

## A SIMPLIFIED METHOD OF FINDING THE ANNUAL INTEREST RATE ON INSTALLMENT CREDIT

Consumers using installment credit are usually advised to shop around and compare costs so they can take advantage of the best deal. A good way to compare credit costs is to compare true annual interest rates on the plans available. But merchants selling goods on the installment plan usually do not quote interest rates, and lenders making cash loans are likely to quote add-on, discount, or monthly rates rather than true annual interest rates.

The consumer can easily translate a monthly rate (percent per month on the unpaid balance) into an annual rate, for he simply multiplies the monthly rate by 12. He is likely to have more trouble figuring the annual rate on other types of credit plans, because the usual formulas are complicated to understand and use. An easier formula is given below. It can be used to calculate roughly the annual interest rate on installment credit of the add-on or discount type when repayment is made in equal monthly or weekly installments. Also given is a set of factors to be used with the formula (see table). The interest rate obtained with this formula will not be quite as accurate as with the longer formula, but it will be accurate enough for comparison shopping.

### Steps in calculating the annual interest rate (approximate)

To calculate the annual interest rate on installment credit:

- 1. Find out what the credit charge will amount to-that is, how much you will have to pay for the use of the money lent to you or the privilege of deferring payment for your purchase. (To do this, subtract the amount of cash or credit you will receive from the amount you will have to repay.)
- 2. Multiply the credit charge (from 1 above) by the factor given in the table for the number of installments you have to pay (use the factor from the appropriate column--"Monthly payment" or "Weekly payment").
- 3. Divide the result of step 2 by the amount of cash or credit you will receive.

In short, use this formula:

Credit charge x factor

Cash or credit received = annual interest rate.

Monthly paymen	ts	Weekly payments		
Number of payments	Factor	Number of payments	Factor	
6	343	12	800	
9	240	16	612	
12	185	20	495	
15	150	24	416	
18	126	28	359	
21	109	32	315	
24	96	36	281	
30	77	40	254	
36	65	44	231	
42	56	48	212	
48	49	52	196	
54	44	78	132	
60	39	104	99	

### Examples

A. The first example is a cash installment loan.

Assume you are considering a \$2,700 loan, discounted at 6 percent and to be repaid in 18 equal monthly installments. The lender subtracts from the face value of the loan the credit charge for the entire  $l\frac{1}{2}$ -year period, amounting to \$243 (0.06 x \$2,700 x  $l\frac{1}{2}$ ), and you receive \$2,457. You agree to pay \$2,700 in 18 monthly payments of \$150 each.

To calculate the annual interest rate on this loan you will use these figures:

The calculation is as follows:

$$\frac{\text{Credit charge x factor}}{\text{Cash received}} = \frac{\$243 \times 126}{\$2,457} = \frac{30,618}{2,457} = 12.46$$

The annual interest rate on this loan is about  $12\frac{1}{2}$  percent.

B. The second example is an installment purchase with add-on charges.

Assume you are buying a refrigerator for which the cash price is \$310, and making a downpayment of \$10. You agree to pay \$14.50 a month for 24 months (a total of \$348) for the \$300 you receive, so the credit charge is \$48 (\$348 minus \$300 = \$48).

The figures you need to calculate the annual interest rate are:

Credit	charge	\$48
Factor	for 24 monthly payments	96
Credit	received	\$300

The calculation is as follows:

$$\frac{\text{Credit charge x factor}}{\text{Credit received}} = \frac{\$48 \times 96}{\$300} = \frac{4,608}{300} = 15.36$$

The annual interest rate will be about 15-1/3 percent.

-- Emma G. Holmes and Carol M. Jaeger

### FOOD PRICES IN LOW- AND HIGH-INCOME NEIGHBORHOODS

The poverty program has focused attention on problems of low-income families, including their problems as consumers. One question is whether families in low-income neighborhoods must pay more than those in other areas for the same goods, so that each dollar they have buys less.

A recent study in six cities showed that foods cost about the same in low-income as in high-income neighborhoods, if bought in the same type of store and in the same quality and quantity. Prices in stores of a given grocery chain were usually the same in the two kinds of neighborhoods. Prices in large independent groceries were similar between the two areas, as were those in small independent stores.

Price differences were apparent between different types of stores within each income area. Small independent stores tended to charge higher prices than chain and large independent stores. According to the agents who made the survey, relatively few large chain groceries were located in the low-income neighborhoods. Thus, the families living there would have to buy from independent stores, which in these neighborhoods were frequently of the smaller type where prices tend to be highest.

These findings are from a survey conducted by the Bureau of Labor Statistics for the National Commission on Food Marketing. Foods were priced in chain, large independent, and small independent food stores in Atlanta, Chicago, Houston, Los Angeles, New York, and Washington, D.C. Low-income areas were determined from the 1960 Census as those census tracts where median family incomes were in the lowest quartile for that city. All other areas in the city were defined as high-income areas.

Prices were collected for 18 food items considered important in the expenditure patterns of low-income families. These included flour, bread, steak, ground beef, pork chops, bacon, chicken, fresh milk, evaporated milk, eggs,

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margarine, grapefruit, lettuce, potatoes, canned peas, sugar, coffee, and cola drinks. Price comparisons between income areas were based on identical qualities and quantities of each food priced. All pricing was done in 1 week in February 1966.

The fact that prices of food items in comparable stores are no higher in low- than high-income areas does not solve the shopping problems of the low-income consumer. Unless he has a chain store nearby or has transportation so he can get to one, he must buy at the higher-priced store in his neighborhood. Even if he has transportation he may be reluctant to go to the big impersonal chain store. He may prefer the neighborhood store in spite of higher prices, because it is friendly or willing to give him credit. Finally, because he has only a small amount of money to spend at a time, he frequently has to buy foods in small quantities even though this makes his total food cost higher.

### MORE AGED PERSONS TO RECEIVE SOCIAL SECURITY PAYMENTS

Many people 72 years old or over who have not been eligible for social security benefits before will receive small monthly payments beginning this fall. The first checks—for the month of October 1966—will be received in November. The Tax Adjustment Act of 1966 amended the Social Security Act to make these payments possible.

During the rest of 1966 and in 1967, a person 72 years old or over may qualify for the new payments (maximum \$35 a month for one, \$52.50 for a couple if both qualify) even if he has never worked in a job covered by social security. Requirements and limitations that determine whether an aged person qualifies for the new payments are as follows:

The person must be a resident of one of the 50 States or the District of Columbia.

The person must be a U.S. citizen, or--if an alien--must have been lawfully admitted for permanent residence and have lived in this country the 5 years immediately preceding the month he applies for benefits.

If a person is receiving—or is eligible for—a regular benefit under a governmental pension system, the special social security payment will be reduced by that amount. This means he will receive the difference between his governmental pension and \$35 a month, if he is single. For example, if he gets a monthly check for \$30 as a State retirement benefit, he will also receive a \$5 social security check. If he is married and his spouse is eligible for a governmental pension, this will be taken into consideration in figuring what the couple will receive.

"Governmental pension system" here refers to any Federal, State, or local government system that provides for payments based on employment. This includes social security and railroad retirement payments but not workmen's compensation or payments by the Veterans Administration as compensation for a service-connected disability or death.

A person may not receive public assistance under a Federally aided program and the new social security payment at the same time. The social security payment will be suspended for any month for which he gets a cash welfare payment (or for which his spouse gets a welfare payment that takes his needs into account).

People who reach their 72d birthday in 1968 will need at least 3 quarters of work covered by social security to qualify for monthly payments at that time. The number of quarters required will increase until it is the same as for regular social security retirement benefits. For men this will be in 1972 and for women in 1970 (see table).

Quarters of social security coverage required to receive monthly payments at age 72 under provisions of the Tax Adjustment Act of 1966

Year of	Number of qu	larters for	
72d birthday	Men	Women	
1966 or earlier 1967 1968 1969 1970 1971	None None 3 6 9 12 (1/)	None None 3 6 (1/) (1/) (1/)	

<sup>1/</sup> Same as for regular social security retirement benefits.

Forms to use in applying for the special payments have been sent to people who are signed up for Medicare and who will be 72 or older in October 1966. Those in this age group who have not signed up for Medicare must contact their social security office to apply by October to prevent any loss of benefits.

Persons who will reach 72 after October 1966 can apply for the special social security payments any time during the 3 months before their 72d birthday. Since no payments can be made for months already gone by before the application is filed, applying after the 72d birthday can mean financial loss.

\* \* \* \* \*

School enrollment of 5-year-old children has risen as public kindergartens spread. In October 1964, 69 percent of all 5-year-olds were enrolled, compared with 58 percent in 1955 and 52 percent in 1950. In metropolitan areas 78 percent of this age group were in school, and enrollment rates of white and non-white children were about the same. In nonmetropolitan areas 51 percent were in school, including 55 percent of the white and 25 percent of the nonwhite 5-year-olds. (Bureau of the Census, Series P-20, No. 148, Feb. 1966.)

The median money income of U.S. families in 1965 was \$6,900 before taxes, according to the Bureau of the Census. 1/ This was about 5 percent higher than in 1964. Since consumer prices also rose, real buying power increased about 3 percent. The income distribution was as follows:

Family income before taxes	Percent of families
Under \$3,000	17
\$3,000 to \$4,999	16
\$5,000 to \$6,999	19
\$7,000 to \$9,999	24
\$10,000 to \$14,999	17
\$15,000 and over	8

Families in the four regions had median incomes as follows: Northeast, \$7,500; North Central, \$7,300; South, \$5,500; and West, \$7,600.

The median income in 1965 of unrelated individuals (persons not living with any relatives) was about \$2,100.

### CONSUMER PRICES

Index of Prices Paid by Farmers for Family Living Items (1957 - 59 = 100)

Item	Aug.	Mar.	Apr.	May	June	July	Aug.
	1965	1966	1966	1966	1966	1966	1966
All items Food and tobacco Clothing Household operation Household furnishings Building materials, house Autos and auto supplies -	107    	110 114 115 111 96 103 106	110    	110     104	110 115 116 111 96 104 105	110    	111

Source: U.S. Department of Agriculture, Statistical Reporting Service.

<sup>1/</sup> U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Consumer Income, Series P-60, No. 49. August 1966.

### Consumer Price Index for Urban Wage Earners and Clerical Workers (including single workers) (1957-59 = 100)

Group	July 1965	May 1966	June 1966	July 1966
All items  Food  Food at home  Food away from home  Housing  Shelter 1/  Rent  Homeownership 2/  Fuel and utilities 3/  Fuel oil and coal  Gas and electricity  Household furnishings and operation  Apparel and upkeep 4/  Men's and boys'  Women's and girls'  Footwear  Transportation  Private  Public  Health and recreation  Medical care  Personal care	110.2 110.9 109.7 117.6 108.3 110.6 108.9 111.2 106.6 103.2 106.9 102.9 106.1 106.8 102.5 112.0 111.5 110.0 121.4 115.3 122.7 108.7 114.6	112.6 113.5 112.0 122.2 110.7 113.5 110.2 115.0 108.2 108.0 108.2 104.6 109.3 109.9 105.0 119.0 112.0 110.5 122.1 118.4 126.3 112.0 116.8	112.9 113.9 112.8 111.1 114.1 110.2 115.8 108.0 107.0 108.1 104.8 109.4 110.1 104.7 119.8 112.2 110.7 122.8 118.7 127.0 112.2	113.3 114.3 112.7 123.5 111.3 114.4 110.3 116.2 107.9 107.0 108.1 109.2 109.6 104.6 119.8 113.5 111.5 129.1 119.1 127.7 112.5
Reading and recreationOther goods and services 5/	111.5	114.7	117.0	117.2 115.3

Source: U.S. Department of Labor, Bureau of Labor Statistics.

<sup>1/</sup> Also includes hotel and motel rates not shown separately.
2/ Includes home purchase, mortgage interest, taxes, insurance, and maintenance and repairs.

<sup>3/</sup> Also includes telephone, water, and sewerage service not shown separately.

<sup>4/</sup> Also includes infants' wear, sewing materials, jewelry, and apparel upkeep services not shown separately.

<sup>5/</sup> Includes tobacco, alcoholic beverages, and funeral, legal, and bank service charges.

G	Cost	t for 1 wee	ek	Cost for 1 month			
Sex-age groups 2/	Tow-cost	Moderate-	Liberal	Low-cost	Moderate-	Liberal	
	plan	cost plan	1	plan	cost plan		
FAMILIES	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	
Family of 2:							
20 to 35 years 3/	15.70	20.80	24.20	67.60	90.30	104.80	
55 to 75 years <u>3</u> /	13.10	17.60	20.00	56.20	76.20	86.70	
Family of 4:	22.80	30.20	35.00	98.60	131.00	151.40	
Preschool children 4/ School children 5/	26.40	35.00	40.80	113.60	151.90	176.90	
School culturen 2/222	20.70	37.00	70.00	الماريد	1)1.90	1-10.90	
individuals 6/							
Children, under 1 year	3.10	4.00	4.30	13.40	17.40	18.60	
1 to 3 years	3.90	5.10	5.90	17.10	22.20	25.40	
3 to 6 years	4.60	6.20	7.10	20.00	26.70	30.70	
6 to 9 years	5.60	7.40	8.80	24.00	32.10	38.30	
Girls, 9 to 12 years	6.40	8.50	9.60	27.60	37.00	41.40	
12 to 15 years	7.00	9.40	10.90	30.10	40.80	47.20	
15 to 20 years	7.30	9.60	10.90	31.60	41.60	47.00	
Boys, 9 to 12 years	6.50	8.70	10.00	28.10	37.70	43.30	
12 to 15 years	7.40	10.30	11.70	32.30	44.60	50.60	
15 to 20 years	8.80	11.70	13.40	38.10	50.80	58.00	
Women, 20 to 35 years -	6.70	8.80	10.10	28.80	38.30	43.70	
35 to 55 years	6.50	8.50	9.80	27.70	36.90	42.20	
55 to 75 years	5.50	7.40	8.40	23.60	32.00	36.30	
75 years and over	5.00	6.60	7.70	21.50	28.50	33.20	
Pregnant	7.90	10.30	11.60	34.40	44.60	50.10	
Nursing	9.10	11.80	13.10	39.40	51.10	56.50	
Men, 20 to 35 years	7.60	10.10	11.90	32.70	43.80	51.60	
35 to 55 years	7.00	9.40	10.90	30.50	40.80	47.10	
55 to 75 years	6.40	8.60	9.80	27.50	37.30	42.50	
75 years and over	5.90	8.30	9.50	25.70	36.00	41.00	

L/ Estimates computed from quantities in food plans published in Family Economics Review, October 1964. Costs of the plans were first estimated by using average price per pound of each food group paid by nonfarm survey families at 3 income levels in 1955. These prices were adjusted to current levels by use of Retail Food Prices by Cities, released by the Bureau of Labor Statistics.

2/ Age groups include persons of the first age listed up to but not

including those of the second age.

<sup>3/</sup> Ten percent added for family size adjustment. For derivation of factors for adjustment, see Family Food Plans and Food Costs, USDA, HERR No. 20.
4/ Man and woman, 20 to 35 years; children 1 to 3 and 3 to 6 years.

<sup>5/</sup> Man and woman, 20 to 35 years; child 6 to 9, and boy 9 to 12 years.
6/ Costs given are for persons in families of 4. For other size families, adjust thus: 1-person, add 20 percent; 2-person, add 10 percent; 3-person, add 5 percent; 5-person, subtract 5 percent; 6-or-more persons, subtract 10 percent.

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- PROTECTING WOOLENS AGAINST CLOTHES MOTHS AND CARPET BEETLES. Home and Garden Bulletin No. 113, April 1966. Supersedes HG No. 24.
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